

1-46. (CANCELED).

47. (CURRENTLY AMENDED) A method of monitoring a patient under medical care, the method comprising the steps of:

providing a sensor arrangement which is arranged to detect motion of the patient [[,]] and produce a motion signal in response to motion of the patient,

monitoring the motion signal,

analyzing the motion signal to determine whether the motion is motion indicative of patient arousal, and

providing an alarm should the monitored motion be indicative of patient arousal

~~monitoring the motion of the patient by way of the sensor arrangement,~~

~~determining whether the monitored motion is indicative of patient arousal from a medical procedure, and~~

~~providing an alarm should the monitored motion be indicative of patient arousal from the medical procedure.~~

48. (PREVIOUSLY PRESENTED) The method in accordance with claim 47, wherein the sensor arrangement is arranged to be responsive to bodily motion of the patient, and when the motion of the patient increases beyond a predetermined threshold indicative of patient arousal, the alarm is provided.

49. (PREVIOUSLY PRESENTED) The method in accordance with claim 48, wherein the sensor arrangement is also arranged to monitor the respiratory motion of the patient, and when the respiratory motion of the patient increases beyond a predetermined threshold indicative of patient arousal, the alarm is provided.

50. (PREVIOUSLY PRESENTED) The method in accordance with claim 47, wherein the sensor arrangement includes a pad on which the patient lies, the pad mounting a sensor for monitoring motion of the patient.

51. (PREVIOUSLY PRESENTED) The method in accordance with claim 47, further comprising the step of providing an alarm should the motion of the patient cease to be detected.

52. (PREVIOUSLY PRESENTED) The method in accordance with claim 51, further comprising the step of providing an alarm should the motion of the patient fall below a predetermined value.

53. (PREVIOUSLY PRESENTED) The method in accordance with claim 47, further comprising the step of monitoring the body temperature of the patient and providing an alarm should the body temperature rise above or below predetermined values.

54. (PREVIOUSLY PRESENTED) The method in accordance with claim 53, wherein a temperature sensor is provided proximate or within the patient to constantly monitor the temperature.

55. (PREVIOUSLY PRESENTED) The method in accordance with claim 54, wherein a control means is arranged to receive signals from the sensor arrangement and temperature sensor, and process those signals to provide the alarms.

56. (PREVIOUSLY PRESENTED) The method in accordance with claim 55, wherein the control means is provided housed in a single unit.

57. (PREVIOUSLY PRESENTED) The method in accordance with claim 47, wherein the patient is an animal.

58. (PREVIOUSLY PRESENTED) The method in accordance with claim 57, wherein the animal is monitored during recovery from anaesthesia or when under sedation.

59. (PREVIOUSLY PRESENTED) The method in accordance with claim 47, wherein the patient is a human.

60. (PREVIOUSLY PRESENTED) The method in accordance with claim 47, comprising the step of assessing a baseline motion rate which corresponds to the motion rate of the patient at the time the baseline assessment is made, and setting the predetermined threshold at a predetermined rate above the baseline level.

61. (PREVIOUSLY PRESENTED) The method in accordance with claim 50, comprising the further step of providing a separate respiratory motion arrangement for measuring respiratory motion of the patient, and comparing a signal from the respiratory motion sensor with the signal from the pad sensor, to obtain an indication of bodily motion of the patient.

62. (CURRENTLY AMENDED) A device for monitoring a patient under medical care, the device comprising a sensor arrangement which is arranged to detect motion of the patient and produce a motion signal in response to motion of the patient, and a control means which is arranged to process signals received from the sensor arrangement and analyze the motion signal to determine whether the detected motion

is indicative of patient arousal, and to provide an alarm should the detected motion be indicative of patient arousal from a medical procedure involving sedation, and to provide an alarm should the detected motion be indicative of patient arousal from the medical procedure involving sedation.

63. (PREVIOUSLY PRESENTED) The device in accordance with claim 62, wherein the sensor arrangement is arranged to detect bodily motion of the patient, and the control means is arranged to provide an alarm when the motion of the patient increases beyond a predetermined threshold.

64. (PREVIOUSLY PRESENTED) The device in accordance with claim 63, wherein the sensor arrangement is also arranged to detect motion due to respiration of a patient, and the control means is arranged to provide an alarm when the motion of the patient increases beyond a predetermined threshold.

65. (PREVIOUSLY PRESENTED) The device in accordance with claims 62, wherein the sensor arrangement includes a pad on which the patient lies, the pad mounting a sensor for monitoring motion of the patient.

66. (PREVIOUSLY PRESENTED) The device in accordance with claim 62, wherein the control means is also arranged to process the signals from the motion monitor to determine whether the motion of the patient has ceased and to produce an alarm if the motion of the patient ceases.

67. (PREVIOUSLY PRESENTED) The device in accordance with claim 66, wherein the device is arranged to provide an alarm should the signal indicate that the motion of the patient has fallen below a predetermined level.

68. (PREVIOUSLY PRESENTED) The device in accordance with claim 67 including input means enabling the predetermined level to be set.

69. (PREVIOUSLY PRESENTED) The device in accordance with claim 62, the control means being automatically arranged to provide default settings for the predetermined level.

70. (PREVIOUSLY PRESENTED) The device in accordance with claim 62, including a baseline set means, which when actuated presets a baseline motion rate which corresponds to the motion rate of the patient at the time the baseline set function is actuated, the predetermined level being taken from the baseline level.

71. (PREVIOUSLY PRESENTED) The device in accordance with claim 62, wherein the control means is arranged to receive input from a temperature sensor

sensing the body temperature of the patient, and is arranged to provide an alarm should the patient's body temperature fall outside predetermined values.

72. (PREVIOUSLY PRESENTED) The device in accordance with claim 62, arranged for use with an animal patients.

73. (PREVIOUSLY PRESENTED) The device in accordance with claim 72, wherein the control means and a display for providing visual indication of patient parameters are mounted in a housing which is adapted to be mounted to a cage for containing the animal patient.

74. (PREVIOUSLY PRESENTED) The device in accordance with claim 62, wherein the device is arranged for a human patient.

75. (PREVIOUSLY PRESENTED) The device in accordance with claim 65, comprising a further sensor arrangement for monitoring respiratory motion of the patient, the control means being arranged to compare the signal from the further sensor arrangement and the signal from the sensor arrangement, to give an indication of the bodily motion of the patient.

76. (PREVIOUSLY PRESENTED) A system for monitoring animal patients recovering from anaesthesia, comprising a plurality of devices in accordance with claim 72, the sensor arrangement being mounted in each case in a cage for retaining an animal recovering from anaesthesia.

77. (CANCELED).

78. (PREVIOUSLY PRESENTED) The method in accordance with claim 96, wherein the step of analyzing the motion of the patient involves tracking the rate of motion over a period of time.

79. (PREVIOUSLY PRESENTED) The method in accordance with claim 78, comprising the further step of applying trend analysis to monitor trends in the motion of the patient.

80. (CANCELED).

81. (PREVIOUSLY PRESENTED) The method in accordance with claim 96, wherein respiratory motion of the patient is monitored.

82-83. (CANCELED).

84. (PREVIOUSLY PRESENTED) The device in accordance with claim 98, arranged to output a graphical output which indicates the rate of motion over a time period of the patient, which can be used to determine the painfulness of the patient.

85. (CANCELED).

86. (PREVIOUSLY PRESENTED) The device in accordance with claim 98, wherein the sensor arrangement is arranged to monitor respiratory motion of the patient.

87. (CANCELED).

88. (PREVIOUSLY PRESENTED) The method in accordance with claim 47, comprising the further step of controlling a peripheral device depending upon the motion of the patient.

89. (PREVIOUSLY PRESENTED) The device in accordance with claim 61, further comprising means for controlling a peripheral device depending upon the motion of the patient.

90-92. (CANCELED).

93. (PREVIOUSLY PRESENTED) A method in accordance with claim 47, wherein the step of monitoring the motion includes the step of monitoring for an increase in rate of motion of the patient over a baseline motion rate, wherein the increase in motion may be due to one or both of bodily motion and respiratory motion.

94. (PREVIOUSLY PRESENTED) A device in accordance with claim 62, the control means being arranged to monitor for an increase in motion over a baseline rate of motion, wherein the increase in motion may be due to one or both of bodily motion and respiratory motion.

95. (PREVIOUSLY PRESENTED) A method in accordance with claim 47, wherein the step of monitoring the motion of a patient is carried out when the patient is recovering from a medical procedure.

96. (CURRENTLY AMENDED) A method of monitoring a patient under medical care, the method comprising the steps of:

providing a sensor arrangement which is arranged to detect bodily motion of the patient [[,]] and produce a motion signal in response to motion of the patient, and

analyzing the motion signal to determine whether or not the patient is displaying signs of painfulness

~~monitoring the bodily motion of the patient by way of the sensor arrangement, and~~

~~analyzing the bodily motion of the patient to determine whether or not the patient is displaying signs of painfulness.~~

97. (PREVIOUSLY PRESENTED) A method in accordance with claim 96, comprising the further step of controlling operation of a peripheral device in response to the analysis.

98. (CURRENTLY AMENDED) A device for monitoring a patient under medical care, the device comprising a sensor arrangement which is arranged to detect bodily motion of the patient and produce a motion signal in response to motion, and a control means which is arranged to process the motion signals ~~received from the sensor arrangement to~~ and analyze the motion signal ~~bodily motion of the patient~~, to determine whether or not the patient is displaying signs of painfulness. ♦♦

99. (PREVIOUSLY PRESENTED) A device in accordance with claim 98, further comprising means for controlling operation of a peripheral device, responsive to the control means.

100. (CURRENTLY AMENDED) A method of monitoring a patient under medical care, the method comprising the steps of;

placing a first electrode and a second electrode on opposed sides of the patient's chest to detect motion of a chest wall of the patient; ♦♦

producing a signal each time a distance between the first and second electrodes increases and decreases indicating the motion of the chest wall of the patient; ♦♦

determining a baseline rate of the signals depending on a frequency of the signals produced; and ♦♦

providing one of an audio or visual alarm when a subsequent signal is determined to be outside a baseline rate range.